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Releasable handle grip for loaded shopping bag - includes tube with inwardly tapering retaining slots adjacent each end and admission slot extending between ends

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The handle grip is for releasably retaining the handles of a loaded shopping bag. The grip comprises a tube having a pair of retaining slots extending adjacent respective ends of the tube. The slots each taper inwardly, so that when the bag handles are passed through them, and the tube is positioned upright and lifted, the shopping bag handles become firmly [redacted]ed in the slots.

The tube has an admission slot extending between its ends. The admission slot is dimensioned to allow the shopping bag handles to pass through it. The tube is pref. approx. cylindrical in shape and may have a hole adjacent the inner end of each retaining slot. A hook may removably engage in the hole for carrying parcels. (17pp Dwg.No.2/5)

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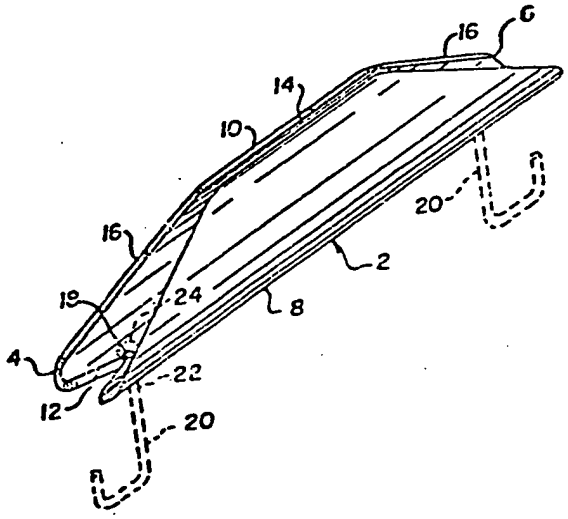

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(54) **Bag handle grip.**

(57) A handle grip for releasably retaining handles (28) of a loaded shopping bag (26) is provided; the shopping bag having either cord handles or being a sheet-type plastics material shopping bag. The handle grip comprises a tube (2) which has a pair of retaining slots (12) extending lengthwise from respective ends (4, 6) of the tube, each of the slots (12) tapering inwardly from its corresponding end so that when the loaded shopping bag handles (28) are passed therethrough, and the tube (2) is positioned upright and lifted (Figure 5), the shopping bag handles will become firmly wedged therein. The tube (2) also has an admission slot (14) extending between the ends of the tube and dimensioned so as to allow the shopping bag handles (28) to pass therethrough.

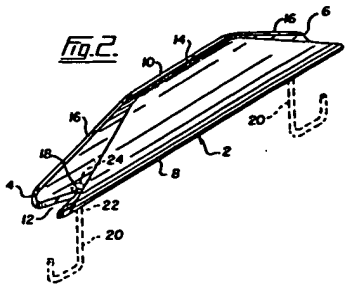

Fig.2.

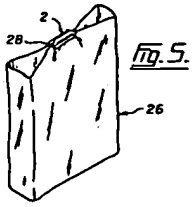

Fig.5.

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BAG HANDLE GRIP

This invention relates to a handle grip for releasably retaining a handle of a loaded shopping bag, the shopping bag having a plastic sheet-type handle, or a cord handle.

It is common practice in a great number of retail outlets for the outlet to place purchased goods in sheet-type plastic shopping bags typically provided free of charge. In addition, in other outlets shopping bags having cord handles are either provided free of charge or for a nominal sum. The handles of both of these types of shopping bags, when the shopping bag is loaded, tends to cut into the hand of the person carrying the loaded shopping bag. This is particularly true in the case of the sheet-type plastic shopping bags, perhaps because of the extremely narrow strip of plastic supporting all of the weight contained in the bag on the user's hand.

Various handles have been suggested in the past for use with shopping bags having cord-type handles. For example, U.S. Patent No. 2,444,558 to Elliott describes such a handle which is basically cylindrical in shape, but which has an offset bore and an offset slot for admitting the handle to the bore. No means are provided for preventing the bag handle from moving longitudinally or transversely within the bore, and hence for preventing corresponding movements in the bag. As well, since the admission slot is offset, it would likely be difficult to engage and disengag the bag handle from the device without using one hand to hold the device and another to position the bag handle.

U.S. Patent No. 2,506,781 also to Elliott, discloses an improvement consisting of an elongated medial partition and an admission slot with diverging ends. The patent indicat s that the partition prevents the support device from turning over when the bag is placed temporarily on a supporting surface, so that the device is retained upright at all times, and therefore ready for use without having to be rotated. U.S. Patent No. 3,083,366 to Franges and U.S. Patent No. 3,149,367 to Dills also describe handle grips for use with bags having cord handles. No provision is apparently made in either of the devices described in those patents to prevent the device from turning over when the bag is placed on a supporting surface. As well, apparently in each device the bag handle can still slide freely through the device, requiring the cord to be repositioned longitudinally in it in situations where the bag is loaded with a medium weight and after the bag has been placed on a supporting surface so that the bag handle has slid longitudinally through it. As well, even when the bag is being carried, upon jerking the bag handle could slide longitudinally through it and remain in an off-centre position within the device as a result of friction of the bag handle with the device.

U.S. Patents No. 2,448,894 to Laus and 2,287,329 to Santa Maria et al both describe handle grips for use with bags having cord handles, which grips suffer from one or more of the disadvantages mentioned above, and are also relatively complex in construction as are the devices mentioned above. U.S. Patent No. 645,317 to Flanders and

1,460,354 to Carver describe package handle grip devices which utilize removable and fixed wire yokes respectively positioned in a substantially rigid handle. In addition to the fact that each of these handles require a wire yoke, neither appears to provide any means for preventing the cord handle or the like from sliding longitudinally through the device, nor provide a positive means of retaining the handle in the device when the package is placed on a supporting surface, without at the same time requiring a two-handed operation for the release of the bag handle. U.S. Patent No. 1,781,583 to Hodgson and U.S. Patent No. 1,268,775 to Stinger both provide handle grips for pails, each being curved to conform to the shape of such a handle. The devices described in each of the patents, in addition to the fact that neither was intended to engage in shopping bag handles, provide relatively complex structural arrangements for retaining the device on the pail handle, and also fail to provide any apparent means for preventing the handle from moving longitudinally through the device. As well, in the case of the device described in Hodgson, apparently no means are provided to prevent the handle from moving transversely within the device. In the device of Stinger, no means are apparently provided to prevent rotation of the pail handle in the device. When the pail is carried in either device then, it could swing from side to side.

The present invention provides a handle grip for releasably retaining handles of a loaded shopping bag, which handle grip comprises a tube. The tube has a pair of retaining

slots extending adjacent to respective ends of th tube, each of which taper inwardly so that when the loaded shopping bag handles are passed therethrough and the tube is positioned upright and lifted, the shopping bag handles will become firmly wedged in the retaining slots. The tube also has an admission slot extending between the ends of the tube, and dimensioned so as to allow the shopping bag handles to pass through it.

Advantageously, the pair of retaining slots are positioned on a lowermost position of a lower side of the tube, and extend lengthwise from respective ends of the tube and taper inwardly therefrom.

Of the various possible shapes of the tube, it is preferred that the tube have a uni-directional convexly downward curvature, and the lower side of the tube is transversely upcurving. Alternatively, the tube is made substantially linear, and the lower side of the tube is transversely upcurving.

The tube may also advantageously be made so as to substantailly conform in shape to a cylinder.

The tube may usefully be additionally provided with a hole adjacent an innermost end of a retaining slot. The handle grip in such an embodiment additionally comprises a hook removably extending through the hole and having an enlarged end abutting the inside surface of the tube. Two holes may usefully be provided adjacent an innermost end of respective retaining slots, the handle grip additionally comrpising two hooks removably extending through respective

holes, and each having an enlarged end abutting the inside surface of the tube.

Preferably, the admission slot is disposed in an upper side of the tube. In addition, the admisssion slot may usefully diverge adjacent the ends of the tube and theretoward. In this latter embodiment, the tube usefully has two holes contiguous with an innermost and of respectiv retaining slots, and the handle grip additionally comprises two hooks outwardly and removably extending through respect: holes, and each having an enlarged end abutting the inside surface of the tube.

The handle grip advantageously comprises a substan tially linear tube. The tube has a lower upcurving side, and a pair of retaining slots on the lower side thereof, which extend lengthwise from repective ends of the tube. The tube also has an admission slot extending between the ends of the tube and dimensioned so as to allow the shopping bag handle to pass through it. In the preceding embodiment, the tube is advantageously provided with two holes adjacent an innermost end of respective slots, and the handle grip additionally comprising two hooks removably extending through respective holes and each having an enlarged end normally abutting the inside surface of the tube.

An embodiment of the present invention will now be described with reference to the drawings, in which:

Figure 1 is a perspective view of a stamped plastic sheet which can be used in manufacturing a handle grip of the present invention;

Figure 2 is a perspective view of a handle grip of the present invention produced from the stamped sheet shown in Figure 1;

Figure 3 is a side view of a hook;

Figure 4 is a perspective view of a sheet-type plastic shopping bag; and

Figure 5 is a perspective view of the bag of Figure 4 with the handle grip of Figure 2 engaged on the handles of it.

Referring particularly to Figure 2, the handle grip shown consists of a tube 2 which substantially conforms in shape to a cylinder. The tube 2 is provided with a pair of retaining slots 12 on a lowermost portion of a lower side 8 of the tube 2. Each of the retaining slots 12 extends lengthwise from respective ends 4,6 of the tube 2, each tapering inwardly from its corresponding end so that when the handles 28 of a bonded shopping bag 26 are passed throug them, and the tube 2 is positioned upright and lifted, as shown in Figure 5, the shopping bag handles 28 will become firmly wedged in the retaining slots 12. An admission slot 14 is provided at an upper side 10 of the tube 2. This admission slot 14 is of such a width as to normally readily accommodate the handles 28 of the shopping bag 26 through the admission slot 14. However, where the handle grip is used with shopping bags having cord handles, the admission slot 14 is able to expand as the tube 2 is outwardly flexi at its upper end 10, this being a result of the thinner construction of the tube 2 at the upper end 10 as is most

clearly shown in Figure 1. The admission slot 14 diverges adjacent the ends 4,6 of the tube 2 so as to form diverging portions 16 at each of the ends 4,6. The tube 2 also has two holes 18 contiguous with an innermost end of each of the slots 12. Two hooks 20 are provided which are of a diameter somewhat less than the holes 18. These hooks 20 outwardly and removably extend through their respective holes 18. The end 22 of each of the hooks 20 is enlarged by means of the flange 24. The flange 24 of each of the hooks 20 normally abutts the inside surface of the tube 2 as shown in broken lines in Figure 2, thereby retaining the hooks 20 in the position shown in Figure 2 when the tube 20 is maintained in an upright position as shown in that Figure.

The handle grip described above may be used with or without the two hooks 20. The tube 2 is placed under the handles 28 of the loaded shopping bag 26, and the tube 2 then moved upward so that the handles 28 pass through the admission slot 14, either contemporaneously or successively (the latter will likely be the case where the user desires to engage the loaded shopping bag on the device by using only one hand). The diverting portions 16 of the admission slot 14 assist in positioning the handles 28 in alignment with the admission slot 14. When the tube 2 is then moved upwardly, by virtue of the shape of the retaining slots 12 in their position at the lowermost portion of the lower side 8 of the tube, the handles 28 will become firmly wedged in the retaining slots 12, due to the weight of the load in the shopping bag 26. Because of this wedging, the shopping bag

handles 28 will be unable to move longitudinally or transversely within the tube 2. The handle grip can then be used to carry the loaded shopping bag 26 in the resulting configuration. However, in situations where the bag 26 is heavily or unevenly loaded, and it is desired to provide additional assurance against longitudinal or transverse movement of the shopping bag handles 28, the tube 2 can then be rotated 360° with the shopping bag handles 28, engaged in the retaining slots 12. This will result in a twist in the handles 28 being positioned adjacent each retaining slot 12, thereby resulting in the handles 28 becoming even more firmly wedged in the retaining slots 12. In addition, this latter configuration virtually ensures that when the shopping bag is placed temporarily on a supporting surface, the handles 28 remain engaged in the retaining slots 12, the tube 2 being unable to rotate with respect to the handles 28, so that when it is desired to again pick up the shopping bag 26 by means of the handle grip, no adjustment of the handles 28 within the tube 2 is required.

When it is desired to disengage the handles 28 from the handle grip, then first, if the tube 2 was rotated 360° with the handles 28 engaged in the retaining slots 12, it should be rotated 360° in the opposite direction to remove the twists in the handles 28. The tube 2 is then slowly rotated a further 180° until the upper side 10 of the tube 2 is downwardly disposed and the lower side 8 of the tube 2 is upwardly disposed. When the tube 2 is then in this position, the handles 28 should be disengaged from the

retaining slots 12, and if they are not, minor shaking may be necessary. The handles 28 will then pass through the admission slot 14 so that the handles 28 then become disengaged from the handle grip. Providing the admission slot 14 is sufficiently wide, the disengagement can also be accomplished with one hand only. The handle grip shown can, of course, be used with a single cord handle bag or a number of such bags, or a number of sheet-type shopping bags. If the thickness of the cord handle or the total thickness of the handles of the sheet-type shopping bag which are attempted to be simultaneously admitted to the tube 2 exceeds the width of the admission slot 14, because of the construction of the tube 2 previously described, the admission slot 14 will tend to automatically enlarge.

The hooks 20 can be used to hang various other parcels from them. The hooks 20 would be particularly useful for a parcel tied with a cord of such a tightness as to be impossible to fit the tube 2 between the parcel and the cord and still have room for the fingers of a user on the lower side 8 of the tube 2. If it is desired to remove the hooks 20, the second end 22 is simply lifted upward toward the upper side 10 of the tube 2, and necessary bending motions to accommodate the bends in the hooks 20 being made simultaneously. The hooks 20 can, of course, be installed by reversing this process.

The handle grip described is preferably injection molded thereby producing a handle grip with smooth edges. Alternatively though, the handle grip described can be

readily made from a thermo-plastic type of plastic. Sheets of the plastic are first stamped to produce the shape shown on Figure 1. Of course, the sheets used would have to have the varying thickness shown. The stamped sheets can then be heat-rolled around a cylindrical mold to produce the handle grip shown in Figure 2. The handle grip produced by this latter process though tends to have rough edges. The hooks 20 are typically made from metal by well known techniques.

Various modifications to the handle grip described above are possible. For example, the hooks 20 and their associated holes 18 in the tube 2, can be dispensed with in situations where it is not deemed necessary to have the hooks 20 present for carrying items such as parcels. It is also not necessary that the tube 2 substantially conform in shape to a cylinder. For example, the tube 2 could have an elliptical cross-section. As well, the tube 2 need not be substantially linear, but could have a uni-directional convexly downward curvature. That is, the tube 2 will curve downwardly only to conform to the shape of the shopping bag handles 28. However, the shape of the tube 2 described above, that is, substantially conforming in shape to a cylinder, is preferred since it produces a handle grip of particularly simple construction. In addition, the retaining slots 12 need not extend lengthwise from respective ends 4,6 of the tube 2 as described above. Instead, a tube could be provided with closed vertical ends, each having a retaining slot of a similar shape to those of the retaining slots described above, vertically disposed. However, again, this

results in a handle grip of more complex construction. position of the admission slot 14 could also be changed somewhat in relation to the position of the retaining sl 12. However, when the admission slot 14 is disposed on upper side 10 of the tube 2, and the retaining slots 12 disposed on a lower side 8 thereof, a particularly simpl constructed handle grip as described above is produced. holes 18 for the hooks 20 need not be contiguous with the innermost end of respective retaining slots 12 as describ above. Instead though, the holes could be disposed on th lower surface 8 of the tube 2 somewhat inwardly of the innermost ends of respective retaining slots 12. Again, though, when the holes are contiguous with an innermost er of respective retaining slots 21 as described above, a particularly simply constructed handle grip is produced, separate portions of a stamp to produce the holes 18 in a plastic sheet not being required. A further alternative i to provide a handle grip comprising a substantially linear tube with a transversely upcurving lower side, wherein the slots on the lower side of the tube are not tapered inwardl but are instead, of a size which will snugly accommodate th handles 28 of a shopping bag 26. Such a device is not as preferred as that described above, since the same positive wedging effect cannot be obtained when anywhere from one to a number of bags are carried by the handle grip. Each of the variations described can of course, be constructed and used in a manner which will be obvious to anyone skilled in the art in light of the above disclosure in relation to the

embodiment shown in the drawings.

As will be apparent to those skilled in the art in light of the foregoing disclosure, many alterations and modifications are possible in the practice of this invention without departing from the spirit or scope thereof. Accordingly, the scope of the invention is to be construed in accordance with the substance defined by the following claims.

CLAIMS:

1. A handle grip for releasably retaining handles of a loaded shopping bag, comprising a tube having:

(a) a pair of retaining slots extending adjacent respective ends of said tube and each tapering inwardly so that when the loaded shopping bag handles are passed therethrough and said tube is positioned upright and lifted, the shopping bag handles will become firmly wedged in the retaining slots; and

(b) an admission slot extending between the ends of said tube and dimensioned so as to allow the shopping bag handles to pass therethrough.

2. A handle grip for releasably retaining handles of a loaded shopping bag, comprising a tube having:

(a) a pair of retaining slots on a lowermost position of a lower side thereof, extending lengthwise from respective ends of said tube and tapering inwardly therefrom so that when the loaded shopping bag handles are passed therethrough and said tube is positioned upright and lifted, the shopping bag handles will become firmly wedged therein; and

(b) an admission slot extending between the ends of said tube and dimensioned so as to allow the shopping bag handles to pass therethrough.

3. A handle grip as described in claim 2, wherein said tube has a uni-directional convexly downward curvature, and the lower side of said tube is transversely upcurving.

4. A handle grip as described in claim 2, wherein said tube is substantially linear and the lower side of said tube is transversely upcurving.

5. A handle grip as described in claim 2, wherein said tube substantially conforms in shape to a cylinder.

6. A handle grip as described in claim 4 or 5 wherein said tube has a hole adjacent an innermost end of a retaining slot, the handle grip additionally comprising a hook removably extending through the hole, and having an enlarged end normally abutting the inside surface of said tube.

7. A handle grip as described in claim 4 or 5 wherein said tube has two holes adjacent on innermost end of respective retaining slots, the handle grip additionally comprising two hooks removably extending through respective holes and each having an enlarged end normally abutting the inside surface of said tube.

8. A handle grip as described in claim 4 or 5 wherein the admission slot is disposed in an upper side of said tube.

9. A handle grip as described in claim 4 or 5 wherein the admission slot is disposed in an upper side of said tube and diverges adjacent the ends of said tube and theretoward, and wherein said tube has two holes contiguous with an innermost end of respective retaining slots, the handle grip additionally comprising two hooks outwardly and removably

extending through respective holes and each having an enlarged end normally abutting the inside surface of said tube.

10. A handle grip for releasably retaining handles of a loaded shopping bag comprising a substantially linear tube having:

(a) a lower upcurving side;

(b) a pair of retaining slots on the lower side thereof extending lengthise from respective ends of said tube; and

(c) an admission slot extending between the ends of the tube and dimensioned so as to allow the shopping bag handle to pass therethrough.

11. A handle grip as described in claim 10 wherein said tube substantially conforms in shape to a cylinder.

12. A handle grip as described in claim 11 wherein said tube has two holes adjacent an innermost end of respective slots, the handle grip additionally comprising two hooks removably extending through respective holes and each having an enlarged end normally abutting the inside surface of the tube.

Fig. 1.

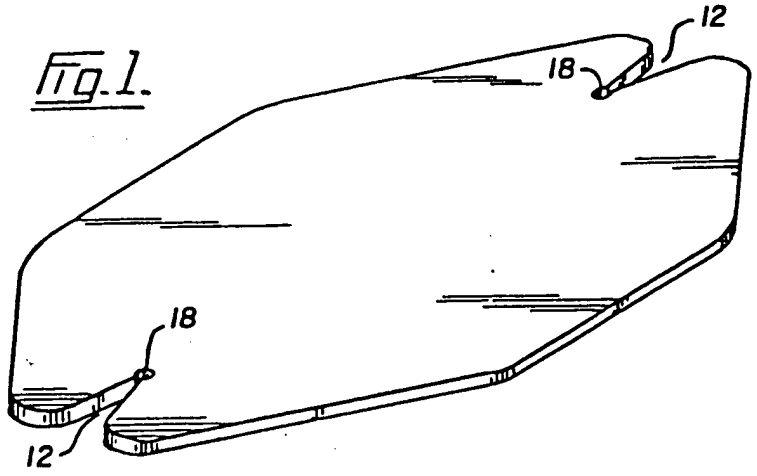


Fig. 2.

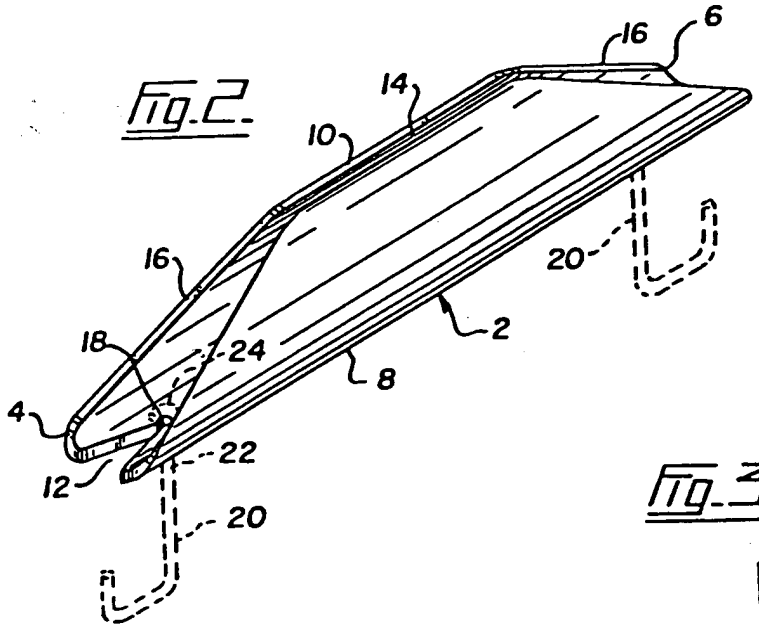


Fig. 3.

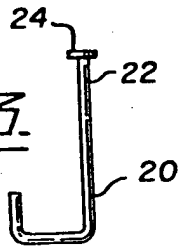


Fig. 4.

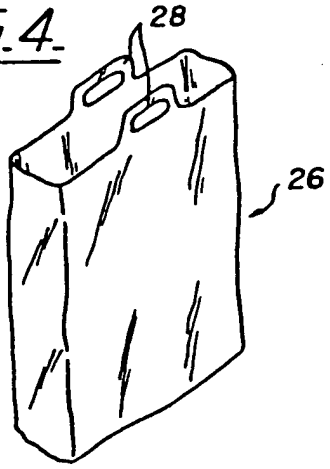
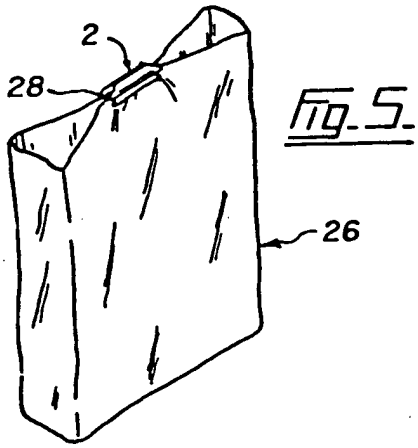


Fig. 5.



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EUROPEAN SEARCH REPORT

0085524
Application number

EP 83 30 0353

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
A	US-A-2 547 343 (O'LOUGHLIN) *The whole document* ---	1,2,5,8,10,11	A 45 F 5/10 B 65 D 33/06
A	DE-A-2 725 481 (KIRSTEN) *The whole document* ---	1,2,3,5,8,10,11	
A	GB-A-2 078 497 (MARGARETA) *The whole document* -----	1,2,8-10	

TECHNICAL FIELDS SEARCHED (Int. Cl. ³)

B 65 D
A 45 F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	09-05-1983	MARTIN A.

CATEGORY OF CITED DOCUMENTS

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